

REMARKS

The application has been amended and is believed to be in condition for allowance.

Prior to this amendment, claims 1-2, 4-13, 17, and 19-24 were pending with claim 1 and 21 being the independent claims.

This amendment incorporates the recitations of dependent claims 10 and 13 into the independent claims, canceling claims 10 and 13. The dependency of claim 11 has been amended in view of claim 10 being cancelled. This amendment also amends claims 1, 4, and 21 responsive to the formal criticisms of the Official Action.

The Official Action rejected all the previously pending claims (claims 1-2, 4-13, 17, and 19-24) under §102 or §103 as being either anticipated by, or in the alternative, as obvious over MALHOTRA et al. 6,303,217, in view of evidentiary art: IKEDA et al. (IEEE Trans. Mag., 33(5), 1997, 3079-3081), AKIMOTO et al. (U.S. Patent App. No. 2002/0001736 A1), BERTERO et al. (U.S. Patent No. 6,500,567), HOWARD (U.S. Patent No. 4,652,499), and TAKAHASHI et al. (U.S. Patent No. 5,853,847).

The Official Action indicates that the recitations of claims 4-13, 19-21, and 22-24 are inherent to the MALHOTRA et al. underlayers and ferromagnetic layers since these layers "are

substantially identical in both structure and composition..." See Official Action sentence spanning pages 5-6.

Concerning the recitations from claims 10 and 13, now incorporated into the independent claims, these features are not believed to be inherent.

The claim 10 recitation represents a distortion in the crystal lattice between layered underfilms, i.e., the lattice misfit recited by the formula in which the x represents a length relating to a lattice of the metal underlayer and y represents a length relating to the lattice of the ferromagnetic metal layer.

On the other hand, the claim 13 recitation regarding the axial length ratio a/b of interatomic distance relates to a distortion in the crystal lattice in the ferromagnetic metal layer alone.

With reference to Table 7 and Figure 6 of the present application, one can see that a lattice misfit ranging from 0.5% to 2.5% does not necessarily (inherently) mean that the magnetic recording medium has a high coercivity H_c . Further, satisfaction of "an axial length ratio a/b of an interatomic distance a in a direction of a normal line to said ferromagnetic metal layer relative to an interatomic distance b in a direction within a plane of said ferromagnetic metal layer is within a range from 1.002 to 1.008" by itself does not ensure high coercivity H_c .

Rather, high coercivity Hc result when both these conditions are satisfied.


The applied art does not show any appreciation for this joint condition and applicants do not see that it would have been obvious for one of skill to selectively set the recited conditions. Accordingly, the applied art falls short of teaching or suggesting all the recited features of the invention, and reconsideration and allowance of all the pending claims are respectfully requested.

Applicants believe that the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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